## UNIVERSITY OF SWAZILAND

# DEPARTMENT OF ACCOUNTING AND FINANCE SUPPLIMENTARY EXAMINATIONS 

EXAMINATION PAPER MAY 2017 ACADEMIC YEAR 2016/2017

| PROGRAMME OF STUDY | Bachelor of Commerce |
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| YEAR OF STUDY | Year 4 (Full Time/Part Time) |
| TITLE OF THE PAPER | Corporate Finance II |
| COURSE CODE | AC $426 / 514$ |
| TIME ALLOWED | Three (3) Hours |

## INSTRUCTIONS

1. There are Four (4) questions, ANSWER ALL.
2. Begin the solution to each question on a new page.
3. The marks awarded for a question are indicated at the end of each question.
4. Show your necessary workings.

NOTE: You are reminded that in assessing your work, account will be taken of accuracy of the language and the general quality of expression, together with layout and presentation of your answer.
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## SPECIAL REQUIREMENT: FINANCIAL CALCULATOR

## QUESTION ONE

a) MTN Swaziland is comparing two different capital structures, an all-equity plan (Plan I) and a levered plan (Plan II). Under Plan I, MTN would have 100,000 shares of stock outstanding. Under Plan II, there would be 50,000 shares of stock outstanding and E15 million in debt outstanding. The interest rate on the debt is 10 percent and there are no taxes.
i. If EBIT is $E 2,000,000$, which plan will result in the higher EPS?
(6 marks)
ii. If EBIT is $E 7,000,000$, which plan will result in the higher EPS? (6 marks)
iii. What is the break-even EBIT?
b) You are considering buying a share of stock in a firm that has the following two possible pay offs with the corresponding probability of occurring. The stock has a purchase price of E50.00. You forecast that there is a $40 \%$ chance that the stock will sell for E70.00 at the end of one year. The alternative expectation is that there is a $60 \%$ chance that the stock will sell for E30.00 at the end of one year. What is the expected percentage return on this stock, and what is the return variance? ( 6 marks)

Total 25 Marks

## QUESTION TWO

a) The last dividend (Div0) is E1.80, the growth rate (g) is $6 \%$, and the required rate of return ( $r$ ) is $12 \%$. What is the stock price according to the constant growth dividend model?
(4 marks)
b) (vii) In a stream of past dividends, the initial dividend is EO .75 and the most recent dividend is E1.25. The number of years between these two dividends $(n)$ is 8 years. What is the average growth rate during this eight-year period? (4 Marks)
c) A bond was issued 15 years ago with a par value of E100 and offering a coupon of 11 per cent annually. The bond will be redeemed in three years' time and is currently trading at E109.50. What rate of return is this bond offering investors in the secondary market? (5 marks)
d) Assume a par value of E100. Suppose that the market interest rate rises overnight from $3.5 \%$ to $8 \%$. Calculate the present values of the 5.5 percent, 3 -year bond and of the 5.5 percent, 30 -year bond both before and after this change in interest rates. How much was the percent decline for each bond?
(8 marks)
PV of the bonds:
e) What is the effect of financial leverage on both Earnings Per Share (EPS) and Return On Equity (ROE).
(4 marks)

Total 25 marks

## QUESTION THREE

a) The Basket Weavers Company in Swaziland has 100,000 bonds outstanding that are selling at par value (E1000). Bonds with similar characteristics are yielding 7.5 percent. The company also has 1 million shares of 10.5 percent preferred stock outstanding with a par value of E 100 and 5 million shares of common stock outstanding. The preferred stock sells for E56 per share. The common stock has a beta of 1.2 and sells for E38 a share. The Swaziland Treasury bill is yielding 3 percent and the return on the market is 12 percent. The corporate tax rate is 34 percent.

## Required

i. Calculate the weighted average cost of capital? (13 Marks)
ii. Identify and explain any Six risks associated with investing in bonds Marks)

Total 25 Marks

## QUESTION FOUR

You have an opportunity to invest in a call option with the following attributes

- Exercise price
- Term to expiry
- Current share price
- Volatility
- Risk free rate

E5.90
Three months
E6.30
15\%
1\%/month

Use the binomial pricing Model to value the option clearly showing in your calculations the three steps of the model

25 Marks

